# HVM187S

## Silicon Epitaxial Planar Pin Diode for High Frequency Attenuator

REJ03G0115-0400Z
(Previous: ADE-208-055C)
Rev.4.00
Oct.08.2003

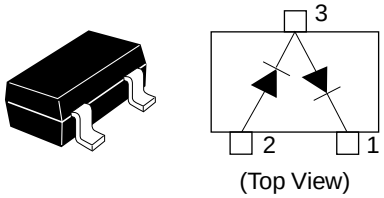
### Features

- Low forward resistance. ($r_f$ = 5.5Ω max)
- MPAK package is suitable for high density surface mounting and high speed assembly.

### Ordering Information

| Type No. | Laser Mark | Package Code |
|---|---|---|
| HVM187S | H3 | MPAK |

### Pin Arrangement




(Top View)

1. Cathode 2
2. Anode 1
3. Cathode 1
   Anode 2

## Absolute Maximum Ratings

(Ta = 25°C)

| Item | Symbol | Value | Unit |
|---|---|---|---|
| Reverse voltage | $V_R$ | 60 | V |
| Forward current | $I_F$ | 50 | mA |
| Power dissipation | Pd *[1] | 100 | mW |
| Junction temperature | Tj | 125 | °C |
| Storage temperature | Tstg | –55 to +125 | °C |

Note: 1. Per one device.

## Electrical Characteristics *[1]

(Ta = 25°C)

| Item | Symbol | Min | Typ | Max | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Reverse current | $I_R$ | — | — | 100 | nA | $V_R$ = 60 V |
| Forward voltage | $V_F$ | — | — | 1.0 | V | $I_F$ = 10 mA |
| Capacitance | C | — | — | 2.4 | pF | $V_R$ = 0 V, f = 1 MHz |
| Forward resistance | $r_f$ | 3.5 | — | 5.5 | Ω | $I_F$ = 10 mA, f = 100 MHz |
| ESD-Capability *[2] | — | 200 | — | — | V | C = 200 pF, Both forward and Reverse direction 1 pulse. |

Notes: 1. Per one device.
2. Failure criterion ; $I_R \geq 100$ nA at $V_R$ = 60 V

## Main Characteristic

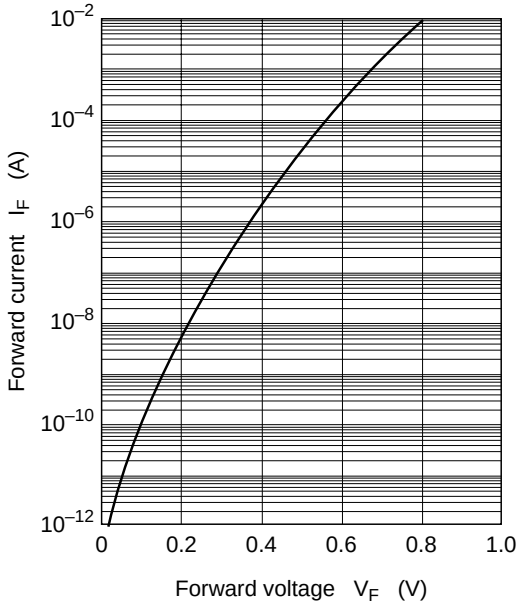



Fig.1 Forward current vs. Forward voltage

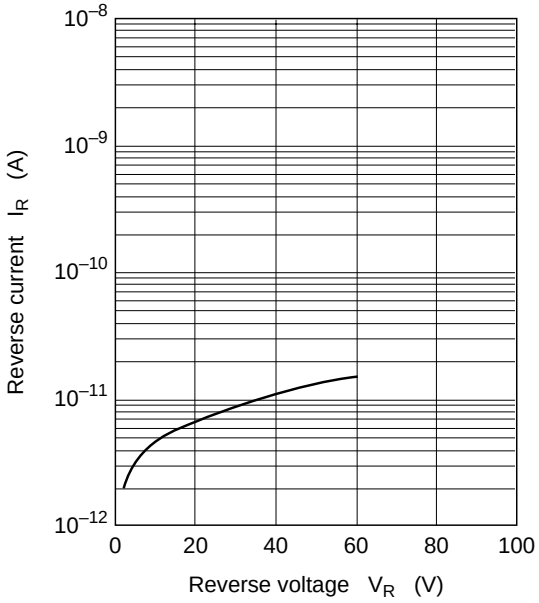



Fig.2 Reverse current vs. Reverse voltage

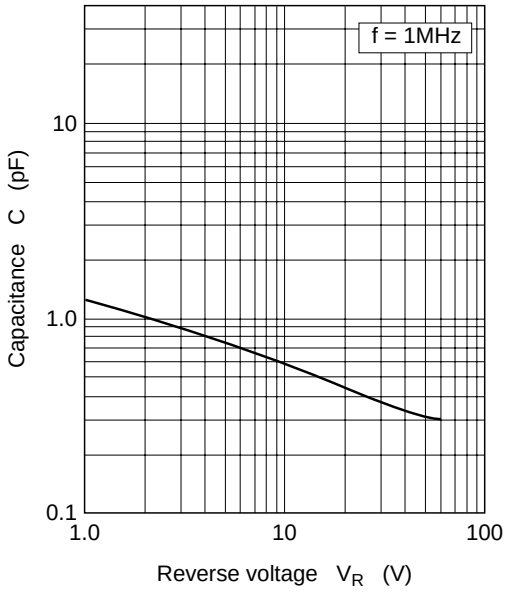



Fig.3 Capacitance vs. Reverse voltage

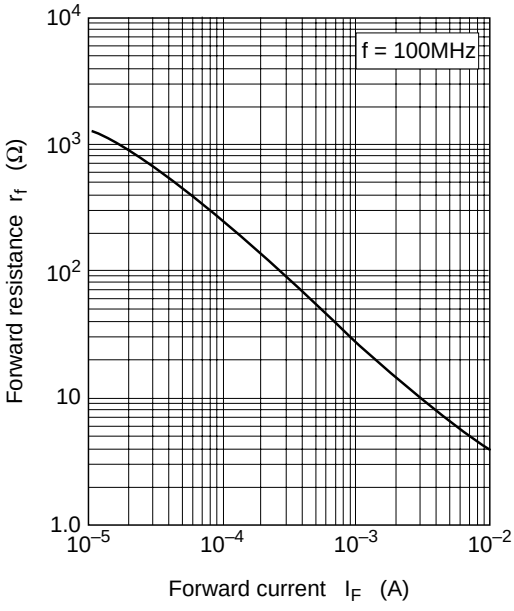
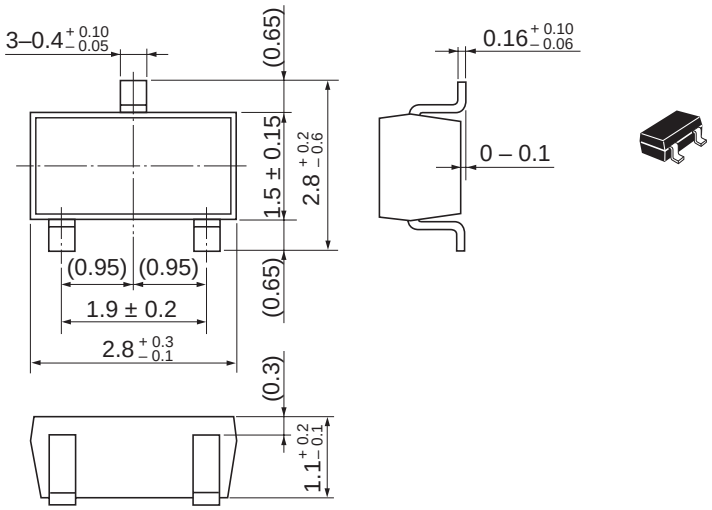



Fig.4 Forward resistance vs. Forward current

## Package Dimensions

As of January, 2003
Unit: mm




| | |
|---|---|
| Package Code | MPAK |
| JEDEC | — |
| JEITA | Conforms |
| Mass (reference value) | 0.011 g |

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